

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016982**Date Inspected:** 28-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Li Yang

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Segment Trial Assembly

This QA Inspector observed ZPMC welder Mr. Hua Linming, stencil 044515 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4b-FCM-1 to make OBG segment 10AE weld CA072-001 and OBG segment 10BE weld CA076-005. These hold back welds join corner assembly edge plates to side plates on the cross beam.

This QA Inspector measured a welding current of approximately 165 amps and Mr. Hua Linming appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Hongren, stencil 062200 used shielded metal arc procedure WPS-B-P-2113-FCM-1 to make "T" stiffener tack welds between OBG segment 10AE bikepath side plate SP350-001 and OBG segment 10BE bikepath side plate SP351-001. This QA Inspector measured a welding current of approximately 160 amps, the welding electrodes were being stored in a portable rod oven which is warm to the touch and it was connected to an electric power cable. This QA Inspector observed that the base materials

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were preheated with a torch prior to welding and Mr. Li Hongren appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Dai Yunbo, stencil 040262 used shielded metal arc procedure WPS-B-P-2113-FCM-1 to make "T" stiffener tack welds between OBG segment 10AE cross beam side plate SP370-001 and OBG segment 10BE cross beam side plate SP371-001. This QA Inspector observed the welding electrodes were being stored in a portable rod oven which is warm to the touch and it was connected to an electric power cable. This QA Inspector observed that the base materials were preheated with a torch prior to welding and Mr. Dai Yunbo appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Tian Xi Dong, stencil 040334 used shielded metal arc procedure WPS-B-P-2113-FCM-1 to make "T" stiffener tack welds between OBG segment 10AE bikepath side plate SP590-001 and OBG segment 10BE bikepath side plate SP591-001. This QA Inspector observed the welding electrodes were being stored in a portable rod oven which is warm to the touch and it was connected to an electric power cable. This QA Inspector observed that the base materials were preheated with a torch prior to welding and Mr. Tian Xi Dong appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

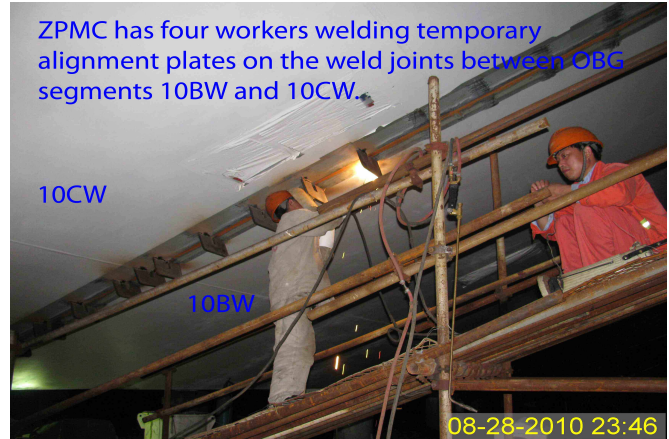
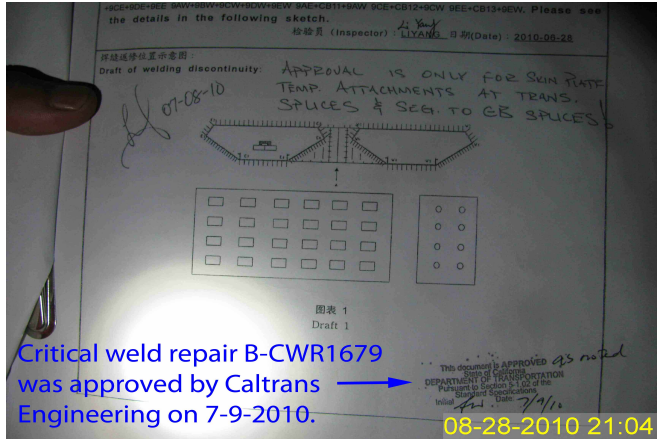
This QA Inspector observed ZPMC welder Mr. Han Yiaofeng, stencil 054467 is using shielded metal arc welding procedure WPS-345-SMAW-4G(4F)-FCM-Repair to make OBG segment 9DW stiffener plate repair weld SSD1-PP081-168. This QA Inspector measured a welding current of approximately 185 amps and Mr. Han Yiaofeng appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Tian Zhaoquan, stencil 045246 is using shielded metal arc welding procedure WPS-345-SMAW-1G(1F)-FCM-Repair to make repair welds of OBG segment 9DW floor beam welds adjacent to where cross beam CB12 will be attached. These welds had been visually rejected. This QA Inspector measured a welding current of approximately 150 amps, the base material was preheated with a torch prior to welding and Mr. Tian Zhaoquan appeared to be certified to make this weld. This QA Inspector observed the welding electrodes are being stored in a heated portable electrode storage container. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xue Yuan stencil 202316 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-Repair to complete repairs of OBG segment 9EW where temporary alignment plates had been removed on the exterior of the counterweight side plate. Caltrans Engineering approved weld repair document BCWR-1679 to perform this work. This QA Inspector measured a welding current of approximately 165 amps and Mr. Xue Yuan appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul
Reviewed By:	Carreon,Albert

Quality Assurance Inspector
QA Reviewer
